GROUP INSURANCE

A. What has been the recent claim experience in the different lines of Group Accident and Health Insurance? What are the reasons for any apparent trends?

B. What criteria may be employed in developing reductions or increases in renewal premium rates for group insurances as a result of experience? To what extent are they reducible to mathematical formula?

C. What are the advantages and disadvantages of approaching the group coverage of hospital, surgical and medical expense of major amount with a schedule of benefits rather than without such a schedule? What are the recent developments in this field of "Group Catastrophe" insurance? What has been the experience as to its salability?

D. To what extent is the total and permanent disability income clause being offered in new group life policies currently issued? What terms and conditions are included in clauses being offered?

MR. J. H. SMITH presented a summary of the Equitable's experience in the various group accident and health lines since the war. The figures given were ratios of incurred claims to incurred premiums according to the rates actually charged, which in many renewal cases differ from manual rates. The weekly indemnity figures show a slight increase in ratios from 1946 to 1950 with a pronounced increase thereafter from 65.4% to 71.3% in 1951. Mr. Smith stated that much of this 1951 increase was due to premium discount factors for the larger groups introduced in the premium structure in 1950. The first three months of 1952 showed a further rise but he explained that this may reflect only a temporary bulge due to winter illnesses.

The combined employee and dependent hospital, surgical and medical expense results are as follows: 1946—61.9%, 1948—67.1%, 1950—75.7%, 1951—80.3%. Some of the increase in 1951 was again due to the size discount factors previously mentioned, but the effect was considerably offset by increases in renewal rates in poor cases. Mr. Smith pointed out that these ratios are not as meaningful as one would like, since the premiums used in the ratios are those actually incurred and hence contain inconsistencies due to changes at renewal as well as the size discounts. However, he stated that it was apparent that the Equitable's experience generally follows the industry figures published by the Group Mortality and Morbidity Committee.

Mr. Smith stated that, as discussed by Mr. Morton D. Miller in a paper presented at a seminar of the Bureau of Accident and Health Underwriters in February, these experience trends seem to be attributable to the

following causes: (1) reductions in premium rates, (2) liberalization of policy provisions and claim practices, (3) increased utilization of medical facilities to take advantage of new drugs, new diagnostic and therapeutic techniques, (4) experimentation with marginal types of groups, (5) existence of insurance, encouraging utilization of medical facilities, (6) increase in duplicate coverage, leading to excessive utilization, and (7) inflation and the resultant increased cost of certain coverage.

Mr. Smith stated that there is much to learn about the complex relationship of the many factors affecting results under this type of insurance and that new studies in progress and prospect in this connection would be of great interest and assistance.

MR. S. W. GINGERY stated that like the Equitable, Prudential's hospital and surgical claim experience was going up in the case of both employee and dependent coverage. Experience figures, independent of the premiums being charged, for the year 1951 indicated that all four forms of coverage in the aggregate had shown an increase. In the case of employees, 1951 showed a 6% increase and dependents a 3% increase. The experience does not show any signs of abating as yet and we can look forward to more of this trend.

Mr. Gingery also pointed out that it was logical to expect an increase in surgical experience if hospital experience was going up, although the experience on surgical was not going up so rapidly. Part of the reason for increased surgical costs may be a greater availability of doctors' services than during the war and less fear of surgery on the part of the public.

The number of children per family is rising and this increase in exposure has not generally been reflected in companies' premium structures.

MR. A. G. WEAVER presented the following John Hancock incurred claim loss ratios by line for the years 1947 through 1951.

GROUP ACCIDENT AND HEALTH EXPERIENCE OF JOHN HANCOCK MUTUAL LIFE INSURANCE CO.

CAL. YEAR	WEEKLY IND.	COMBINED HOSPITAL SURGICAL MEDICAL EXPENSE	HOSPITAL EXPENSE		SURGICAL EXPENSE		MEDICAL EXPENSE	
			Emp.	Dep.	Emp.	Dep.	Emp.	Dep.
1951...	86.1%	79.2%	79.9%	87.0%	78.4%	74.4%	65.5%	54.9%
1950...	75.1	74.0	69.3	86.0	70.0	76.3	55.5	40.7
1949...	68.0	67.5	62.5	78.2	63.7	72.0	41.1	47.5
1948...	63.8	66.9	65.3	76.1	61.1	75.5	37.7	27.8
1947...	71.8	65.4	65.5	72.3	62.6	69.4	26.9	24.5

Increases approximate 15% for the more important lines. Mr. Weaver attributed some of these increases, possibly 7% or 8%, to the recent trend toward basic rate reductions, coverage enlargements without additional premium, size discounts and increased maximum benefits; the remaining increase resulted from higher claim costs per unit of benefit. While this is the trend indicated by intercompany studies for hospital and surgical unit claim costs, such intercompany figures have shown a downward trend over the period 1947-1950 for the weekly indemnity coverage. Preliminary indications are that the John Hancock contribution to the 1951 intercompany study will show a sharply increased unit claim cost for this coverage.

In addition to those factors suggested by Mr. Smith and Mr. Gingery as being responsible for the increase in unit claim costs, Mr. Weaver suggested:

1. Marginal workers similar to those employed during World War II have entered the labor market as a result of full employment conditions.
2. The percentage of married women in certain industries has increased rapidly without corresponding increase in premium rates.
3. An increasing number of workers may reason that insurance premiums come directly or indirectly from their pockets, so they are entitled to all possible benefits, regardless of true need.
4. The greater awareness of prepaid medical plans may be encouraging a review of schedules of benefits to take full advantage of insurance benefits.
5. More liberal underwriting has tended to reduce the element of coinsurance present in earlier plans.

Mr. Weaver stated he could see no early end to the present upward trend in unit claim costs. On the other hand, claim loss ratios can be expected to drop as companies take steps to improve their present loss position.

MR. P. A. RABENAU confirmed that the claim trend mentioned by the previous speakers under Group weekly benefits, hospital and surgical coverages had also been experienced by the Metropolitan with a particularly sharp increase in experience in 1950 and 1951. Of the many reasons to which this trend is attributable, he stressed that the problem of overinsurance and the practice of permitting small liberalizations in claim procedure or administrative provisions were important in that they were at least subject to some measure of control by the insurance company.

MR. R. D. ALBRIGHT reported on a study recently completed by Provident Life. He pointed out that since a large part of his company's business is from the south and southeast, which is generally the lowest

cost area in the country for hospital expense benefits, their results might differ substantially from the experience of other companies.

Mr. Albright's company found that the claim cost of surgical expense benefits was about 5 to 7 percent higher than that indicated by the most recent intercompany investigation. Based on their present manual premium rates, it was found that the experience of plans with a high daily benefit was reasonably favorable whereas the experience under plans with low daily benefits was uncomfortably high. This was attributed to the sharp increase in hospital charges for miscellaneous services. Under the conventional method of charging premiums, there is more margin in the plans providing low daily benefits. He stated that their experience on hospital expense coverage was much higher in the region around Wheeling, West Virginia, southwest along the Ohio River to about Portsmouth, Ohio, as compared with the rest of the country. From an analysis of claims in this area, it was found that although there is a below-the-average duration of confinement of only 6 to 7 days, there is a very high frequency of nonoperative confinements. Excluding maternity cases, about 50% of the hospital admissions did not involve surgical care.

He stated that greater utilization of hospital facilities for nonoperative illnesses is also being evidenced in their business elsewhere, but as yet it is not so pronounced as it is in the Upper Ohio Valley region.

Mr. Albright pointed out that even if general prices were stabilized the cost of hospital care is likely to increase because of the growing tendency, in some areas at least, for doctors to hospitalize their patients for relatively minor causes. Furthermore, this is accentuated as more hospital facilities become available.

MR. G. S. BERE stated that studies of the experience of the London Life for the last 4 years showed a general increase in loss ratios from 71.0% in 1948 to 76.8% in 1951 for the five major lines combined. This increase is most marked in the case of employee hospital expense coverage, which increased from 68.0% to 81.1%, and dependent hospital expense coverage, which increased from 86.5% to 97.3%. On the other hand, the loss ratio under weekly indemnity coverage decreased from 65.8% to 63.9%.

The main reason for the increase in hospital and surgical experience was the reduction in premium rates and the effect of rerating many old policies to the new basis. When converted to present manual premiums, loss ratios for the period remained fairly constant for all coverages combined, decreased for weekly indemnity and increased slightly for employee and dependent hospital expense coverage.

The cost of hospital benefits per $1.00 of daily hospital benefit in force increased 7% on employees and 11% on dependents. Mr. Bere attributed

this increase largely to a greater use of plans with 10 or more times special services compared with 5 times and the greater popularity of maternity coverage on dependents. On employee surgical there was almost no change in annual cost per unit insured. However, on dependents there was a 17% increase which Mr. Bere attributed to changes in schedules, revisions of old plan benefits and a greater popularity of maternity plans.

London Life has maintained the traditional method of making their rates proportional to the dollars of daily hospital benefit with respect to special services. A survey of the two-year period showed that for employees the cost for special services charges varied according to the daily benefit except when the rate of benefit was considerably below normal. This was not true to the same extent in the case of dependents coverage.

Mr. Bere drew attention to the fact that higher birth rates since the war over a period of time had developed larger sized families and called for higher rates for dependents.

MR. E. A. GROSSMAN, in discussing section B, presented a mathematical formula for determining the amount of rate adjustment in connection with group life insurance. This formula was developed by Mr. Grossman and Dr. Bernard Friedman, Associate Professor of Mathematics at New York University. The formula presented depends on E, the expected amount of claims; A, the actual amount of claims; and $\bar{x}$, the average size certificate. In the case where the standard deviation is given by $\sqrt{E\bar{x}}$ Mr. Grossman indicates that an adjustment in rates is necessary if $|A - E| > \alpha\sqrt{E\bar{x}}$, where α is a certain numerical coefficient of the standard deviation (Mr. Grossman in his example took α to have a value of 3). In the event an adjustment is indicated, the premium rates should be adjusted to produce the following percentage increase or decrease in amount of expected claims:

$$rE = A - E + \tfrac{1}{2}\alpha^2\bar{x} \pm \tfrac{1}{2}\alpha\sqrt{4A\bar{x} + \alpha^2\bar{x}^2}$$

where r denotes the percentage change in expected claims. If A is less than E, the plus sign in front of the square root is to be used; otherwise, the minus sign.

Mr. Grossman pointed out that modifications in the adjustment called for by the formula can be made for practical reasons.

MR. H. J. STARK pointed out that a change from the initial premium rate should be established only when the number of claims involved in the prior experience is significantly large. Since the expected frequency of claims and the amount per claim varies considerably by type of coverage, a considerably longer period of time is required in the case of group life insurance than for group accident and health insurance to have a signifi-

cantly large number of claims. Mr. Stark stated that the Metropolitan attempts, to the extent that is practical, to avoid increases in group premium rates based on one year's unfavorable experience, particularly if the group has prior favorable experience.

While it is possible to reduce the computation of an increase required for a group to a mathematical formula, such formula will take into account only a fraction of the information which is available. The formula can take into account the poor experience of the group and the probability of chance fluctuation. It can with considerable additional complexity take into account a company's general experience with the particular coverage or coverages involved, but it cannot without extreme complexity take into account what is known of the experience of other groups in the industry and all other groups in the same area. Further, it is not practical to allow for variations in the age levels of different groups. Accordingly, the Metropolitan feels that better results can be secured by placing a considerable degree of discretion in the hands of well trained underwriters of good judgment.

Mr. Stark stated that it was particularly important in the case of hospital, surgical and related benefits to take into account the effect of age. He stated that in general they try to adjust rates on groups with significantly unfavorable experience to an extent which gives a reasonable prospect that they will be thereafter self-supporting. Every effort is made to carry the same principles into initial quotations on business which is transferred from other carriers.

Although the use of dividends or retrospective rate adjustments raises the question of whether it is necessary to make adjustments in premium rates at all in the event of favorable experience, Mr. Stark stated that it was equitable to lower the gross premium rate where a large group has been experiencing a claim rate at a level generally below what was expected.

The Metropolitan has developed a nonmathematical working formula which sets appropriate limits on the amount of rate reduction but which places chief reliance on the judgment of trained underwriters. Basically, they determine, for groups with favorable experience and above an appropriate minimum in size, an expected claim rate and an expected retention. The expected retention, for expenses and contingency charges, can be estimated quite readily. Determining the expected claims, however, is in large measure an exercise of judgment. The underwriters are directed to take into account not only the average of the claim experience of the group, but also the experience of other groups in the same industry, the average premium age of the employees, and, where appropriate, the ex-

perience of other groups in the same general geographical area. Important also are special underwriting factors that may be present in a particular case. In addition to all of these, under coverages combined for dividends consideration must also be given to experience on other coverages.

If the sum of the expected claim rate and retention is less than the premium rate being charged by more than a minimum percentage, a substantial fraction, but not all, of the excess is available for reduction in gross premiums. In applying this method it is necessary that the judgment of different individuals be kept in line by frequent intercomparisons and by review and discussion.

MR. W. W. MINCKS supported Mr. Stark's views that the practical problems involved in experience rating group insurance did not permit the use of any iron-clad mathematical formula.

MR. W. W. KEFFER, in discussing section C, stated that the Connecticut General is offering two basic types of Group Major Medical Expense insurance coverage:

1. The familiar "Flat Deductible" plan which pays a percentage of medical costs over and above a fixed amount on each claim, regardless of other coexisting coverage, and
2. A plan providing reimbursement of 75% of medical expenses in excess of payments under a basic hospital policy of the usual type plus 5% of the employee's rate of annual earnings. This latter plan produces an increasing deductible on any claim as the individual's income increases. In connection with this plan, premium rates have been graded to give credit to groups where the average annual salary indicates that they include a fair cross section of the working population.

Both of these plans are intended for sale only to groups large enough so as to minimize the probability of antiselection. Some evidence of antiselection factors at work has been observed where small groups of top-level personnel buy the "Flat Deductible" plans, and Mr. Keffer recommended a minimum of 100 lives or so, possibly with some allowance for dependent coverage on this type of plan.

He stated that while plan 1 is made available for competitive reasons, they try to stimulate interest in plan 2, as more equitable between employees at different salary levels, and offering a sounder base for underwriting control and integration with existing coverages.

He also expressed the opinion that plans with a minimum of "internal" restrictions, such as hospital daily benefit limits or surgical schedules, would be easier to administer and have greater public appeal, although experience must yet demonstrate that coinsurance and deductibles alone provide sufficient control.

Because of Wage Stabilization and reduced experience-rating margins as a result of deterioration of hospital and medical experience on existing groups, 1951 was a poor test of the potential market for this new coverage.

MR. E. B. WHITTAKER stated in his answer to the first part of question C that he felt there should obviously not be a schedule of benefits for group coverage of hospital, surgical and medical expense of major amount since the purpose of this insurance is to insure people in the higher income brackets from the doctor charging them more than if they were in the lower income brackets. Therefore, a schedule would serve no purpose at all. The people in the upper brackets would still not get enough and it would increase the cost for those in the lower brackets.

Mr. Whittaker stated that while there is much interest on the part of employers in this coverage, Wage Stabilization controls have retarded the sale. On a large case that the Prudential enrolled for this coverage difficulty was experienced in enrolling employees earning less than $5,000 per year since the entire cost of the coverage was being paid for by the employees. With an employer contribution of 50% Mr. Whittaker felt that they would have been able to interest many more persons in the lower income brackets.

MR. W. S. THOMAS in discussing certain limits which may be placed on the benefits provided by Major Medical Expense coverage stated that the hospital room and board benefits may be controlled either by limiting coverage to a semiprivate room rate with a specific allowance towards a private room or by excluding any room and board charge in excess of, say $20, from the definition of covered medical expense. Another type of "inside limit" which may be imposed is to specify that the surgeon's charge in excess of either a specified amount or an amount which is in accordance with a multiple of a standard surgical schedule will be excluded. Similarly, limitations may be placed on amounts which may be payable for such items as services of registered nurses, physicians' visits other than surgeon, consultants, diagnostic X-ray and laboratory examinations. Inside limits may have the advantage of not permitting any one type of medical expense to comprise an undue proportion of the total benefits paid and may be a hedge against increasing claim costs due to inflation. He said that placing an "inside limit" on any type of medical expense is, in essence, a form of coinsurance. On the other hand, the specifying of certain maximums may result in the maximums becoming the fee as in the case of surgical operation insurance. Further, such limits introduce complications in employees' understanding of the plan and in claim administration and detract from providing a well-rounded coverage.

Mr. Thomas stated that the Metropolitan was currently experimenting

with both types of plans, that is, one without any inside limits and the other with inside limits. As in the case of the previous speakers discussing this topic, he said that there had been a lot of looking and asking as compared with buying in this field of coverage.

MR. E. A. DOUGHERTY, in discussing section D, stated that in an attempt to get some data on the subject of including a total and permanent disability income clause in group policies, he wrote to 17 companies asking about their practice. The companies were not selected as a cross section but were picked because he thought it likely that they might have such a clause. It turned out that all of the companies to which he wrote did have a total and permanent disability clause. However, 13 of the 17 indicated that the clause was not generally available; apparently they would write it only under exceptional circumstances. Of the remaining 4, 2 stated that the clause was limited to superselect groups and that left only 2 companies where the clause is not greatly restricted in its availability. Some companies indicated that they had allowed the total and permanent disability provision only where it had been included in coverage that the employer previously carried or where it was already in a contract that was being duplicated for a subsidiary of the original purchaser. One company reported that it had only one such clause in effect which resulted from a union-negotiated contract involving 3,000 lives. One of the largest companies had written only six cases involving the total and permanent disability income clause in the last 20 years. Apparently the size of the case is an important consideration. One company stated that in large cases there is a much larger margin in the expense loading and this gives additional protection should the disability benefit be unprofitable. Other underwriting considerations mentioned were type of industry, rate of employee turnover, geographical location, and general stability. Ten companies out of the 17 mentioned the desirability of careful selection.

Without exception the disability income reduces the face amount of the insurance, and disability must occur before age 60.

MR. H. F. HARRIGAN stated that recent years had seen a revival of interest on the part of employers in including the instalment disability benefit in group life policies. However, there has not been any great volume of new business issued with this provision although increases on older policies have been considerable. Perhaps one of the reasons more new business is not written with an instalment disability benefit is that companies operating in New York State are required to charge a minimum additional annual premium of $1 per thousand for risks containing such a benefit.

Under the usual form of instalment disability benefits, disability must commence before age 60 in order for benefits to be payable. Since the nor-

mal retirement age under most pension programs and under Social Security is 65, requests are sometimes received to provide benefits for disabilities occurring between ages 60 and 65 to fill this gap. In such cases the Metropolitan has occasionally written a limited form of instalment benefit under which instalments are payable only up to the 65th birthday and then cease. Mr. Harrigan cautioned that we must be mindful of the past unsatisfactory experience with this benefit and avoid unsound underwriting. In particular, duplication of coverage should be avoided and annual instalment benefits should not exceed 40% of annual earnings.

MR. J. J. MARCUS stated that the Prudential provides a total and permanent disability income clause wherein the face amount of insurance is reduced by the amount of disability payments over a 5 or 10 year period. Relatively little demand has been encountered for this clause except as a replacement of business already containing such benefits. He confirmed Mr. Harrigan's view that the additional cost of $1 per year per $1,000 is a deterrent in the sale of this coverage. The Prudential's most recent clause provides for the payment of the face amount in 120 instalments which the company prefers to the 60 months clause. The guaranteed rate of interest is 2% and disability must occur prior to age 60. One requirement is that the certificate holders be continuously insured for one year before they can be eligible for this total and permanent disability benefit. The clause provides that the first instalment is payable 6 months after the commencement of continuous total and permanent disability or 3 months after receipt of proof, whichever occurs later.

If the insured recovers he may be insured only for the scheduled amount less the instalments already made, except that provision may be made for a small minimum amount.

Mr. Marcus also pointed out that careful underwriting consideration of requests for this coverage was essential.